PUERPERAL WOMEN'S PERCEPTIONS ON VERTICAL AND HORIZONTAL DELIVERIES[1]

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This qualitative study aims to better understand the perceptions of puerperal women regarding their experiences in vertical and horizontal deliveries and identify positive and negative aspects of each position. Semi-structured interviews were carried out with ten puerperal women hospitalized in the rooming-in unit of a teaching hospital. After thematic analysis – Collective Subject Discourse – positive aspects of the vertical position emerged, namely: greater comfort, freedom of movement, reduction of the expulsive effort, favors women's participation. Negative aspects were listed as discomfort and lack of obstetric intervention. Positive aspects of the horizontal position were reported as quickness, feelings of security and of being helped. Negative aspects were related to discomfort and difficulty in exerting strength. Positive aspects of the vertical position and negative aspects of the horizontal position stood out more intensely and frequently, and are in accordance with scientific evidence.

DESCRIPTORS: parturition; labor stage, second; humanizing delivery; qualitative research

PERCEPCIONES DE PUÉRPERAS SOBRE LA VIVENCIA DURANTE EL PARTO EN LA POSICIÓN VERTICAL Y HORIZONTAL

Se trata de un estudio cualitativo, cuyo objetivo fue conocer las percepciones de las puérperas sobre la vivencia del parto en la posición vertical y horizontal, identificando los aspectos positivos y negativos de cada posición. Fueron entrevistadas 10 puérperas en el alojamiento conjunto de un hospital universitario. Después del análisis temático – Discurso del Sujeto Colectivo – emergieron los aspectos positivos de la posición vertical: más cómoda; favorece la movilidad y reduce el esfuerzo de expulsión; favorece la participación de la parturienta; siendo la incomodidad y la falta de intervención obstétrica apuntados como negativos. En lo que se refiere a la posición horizontal, los aspectos positivos fueron: el parto es más rápido, genera seguridad y sensación de ser ayudada y los negativos estuvieron relacionados a la incomodidad y dificultad para hacer fuerza. Los discursos sobre los aspectos positivos de la posición vertical y negativos de la horizontal se destacan de forma más intensa y frecuente y están congruentes con las evidencias científicas.

DESCRIPTORES: parto; segundo periodo del trabajo de parto; parto humanizado; investigación cualitativa

PERCEPÇÕES DE PUÉRPERAS SOBRE A VIVÊNCIA DE PARIR NA POSIÇÃO VERTICAL E HORIZONTAL

Estudo qualitativo, cujo objetivo foi conhecer as percepções das puérperas sobre a vivência de parir na posição vertical e horizontal, identificando os aspectos positivos e negativos de cada posição. Foram entrevistadas 10 puérperas no alojamento conjunto de um hospital universitário. Após análise temática – Discurso do Sujeito Coletivo – emergiram os aspectos positivos da posição vertical: mais cômoda; favorece a movimentação; reduz o esforço expulsivo; favorece a participação da parturiente; sendo o desconforto e a falta de intervenção obstétrica apontados como negativos. Quanto à posição horizontal, os aspectos positivos foram: o parto é mais rápido, gera segurança e sensação de ser ajudada e os negativos estiveram relacionados ao desconforto e dificuldade para fazer força. Os discursos sobre os aspectos positivos da posição vertical e negativos da horizontal destacam-se de forma mais intensa e frequente e estão congruentes com as evidências científicas.

DESCRITORES: parto; segunda fase do trabalho de parto; parto humanizado; pesquisa qualitativa

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INTRODUCTION

In most civilizations, childbirth has been performed with the woman in the vertical position. From the 16th century onwards, the lying position was adopted, putting women in an anti-physiological position, which contributed to the use of unnecessary technology[1].

After the medicalization of childbirth, the gynecological position during the expulsive period started to be considered the most adequate to perform healthcare procedures and was adopted as a classical position during childbirth. As in other obstetrical interventions, this position was indiscriminately adopted without properly evaluating its effectiveness and safety[2-4].

Currently, the World Health Organization (WHO) recommends, based on scientific evidence, that parturients are not put in the gynecological position during labor and delivery because it is considered harmful and ineffective. However, every woman should be free to choose her position[5].

Recent evidence shows that the vertical or lateral position, when compared to the horizontal position (supine or gynecological), reduces the duration of the expulsive period, complaints of severe pain, number of C-sections, the need for episiotomy, and alterations in fetal heartbeat. However, the use of this position is related to the increasing number of second-degree perineal laceration cases and blood loss of more than 500 ml. Considering the risks and benefits of different positions, women should be allowed to make informed decisions on which position to adopt during delivery[6].

In general, maternities in Brazil still recommend the horizontal position during delivery and do not allow women to choose[7], although some maternities started to attend deliveries in the vertical or lateral position, based on WHO recommendations for childbirth care[8-9].

The implementation of non-supine positions in the expulsive period has been one of the evidence-based practices, which is part of the transition from the care model focused on technology to one focused on physiology[9]. However, it is necessary to verify how women have experienced this change in childbirth position so as to evaluate whether women consider this practice favorable.

Thus, this study aimed to discover how puerperal women perceive childbirth in the vertical and horizontal positions, identifying positive and negative aspects of each position during the childbirth experience.

METHOD

This is an exploratory qualitative study, carried out with puerperal women attended in the teaching hospital at the Federal University of Santa Catarina (HU/UFSC). Ten women who gave birth in vertical and horizontal positions were interviewed in the rooming-in unit upon their hospital discharge from November 2006 to February 2007. A semi-structured interview with a thematic script was used and recorded. The number of puerperal women was established during data collection by information saturation, that is, when information became repeated.

Recorded interviews were fully transcribed, checked and corrected by listening to the recordings a second time. To organize data originated from interviews, Ethnograph version 5.0 software was used.

Through thematic content analysis, central ideas and key expressions were identified, based on which the Collective Subjective Discourse was constructed. It consisted of a synthesis, in the first person singular, of key-expressions, which corresponded to each Central Idea. This methodological proposal for the organization and tabulation of qualitative data is based on the assumption that collective thinking can be seen as a set of discourses on a given topic[10].

The Research Ethics Committee at the Federal University of Santa Catarina approved the research protocol (No. 276/06). Participants were informed on the objectives and the research development and agreed to participate through a written free and informed consent term. Ethical aspects are in accordance with Resolution 196/96.

The concept of vertical position in this study refers to childbirth attended on an obstetric table without leg holders, which allows the parturient to squat at the moment of expulsion. This practice was gradually incorporated by the entire health team at the HU/UFSC maternity, according to women's choice. In the horizontal position, also described as gynecological or supine position, the parturient is put in gynecological position with ankles support. In international literature, the vertical position is classified as non-supine and the horizontal one as supine[6,11].

RESULTS AND DISCUSSION

Sociodemographic and obstetric characteristics of puerperal women

Interviewed women were between 20 and 37 years old, four were married and six were in stable unions, nine were white and one was black. With regard to schooling, four had complete primary school and two had incomplete primary school; three did not complete secondary school and one was attending college. Six women had paid work, three were housewives and one was a student. Regarding parity and participation in educative activities during the prenatal period, six were secundipara (G_2P_2) and four were multipara (G_4P_4 - two; G_5P_4 - one; G_5P_3 – one); three had not participated in any lecture for pregnant women, six participated in between one and three and one in eight lectures.

Of the ten interviewed puerperal women, eight were accompanied by their husband in their last delivery; one was accompanied by her sister and only one had no companion. All gave birth in the vertical position in the last delivery and the one before was in the horizontal position. All newborns from their last delivery were full-term with no clinical intercurrence that indicated hospitalization in the neonatal intensive therapy unit.

Positive aspects regarding vertical and horizontal positions during delivery

Central ideas that emerged from interviews with puerperal women expressing positive aspects of deliveries in vertical and horizontal positions are presented in Table 1.

Table 1 – Puerperal women's central ideas on positive aspects of vertical and horizontal positions during delivery. Florianópolis, SC, Brazil 2006-2007

Central Ideas - Positive Aspects	
Vertical position	**Horizontal Position**
CI 1- the vertical position is more comfortable and fastest to expulse the baby	CI 7- Delivery is faster during horizontal position due to the episiotomy
CI 2- The parturient feels freer to move in vertical position	CI 8 - Horizontal position generates the feeling of security and of being "helped"
CI 3- During vertical position, strength is better directed, reducing effort	CI 9 - Horizontal position is more comfortable
CI 4- the parturient participates more and is able to watch the birth of the baby during vertical position	
CI 5 - Postpartum recovery is faster in the vertical position	
CI 6 - Back pain is reduced	

Positive aspects on the vertical position are related to the sensation of comfort, freedom of movement, reduced expulsive effort and pain, and women's more active participation. On the contrary, positive aspects of the horizontal position are characterized by interventions, especially episiotomy, feeling of being "helped" and comfort by the possibility of lying down. The most important central ideas are herein discussed with their respective Collective Subject Discourse (CSD).

CI 1 – Vertical position is more comfortable, easier and faster to expulse the baby

Squatting is better for delivering (vertical position), it was much faster [...] the effort we exert, it comes out fast [...] it is not forced as in the lying position, which sometimes takes longer, then they have to cut us... lying down is difficult. Squatting is more comfortable, easier; you don't fall down or turn because you're supported [...]. The other position (horizontal) is lying down with your legs up. I didn't like this position, I liked squatting better [...] the body's nature asked me to sit, lying down would hurt more. The advantage of squatting is that it was natural to sit to have the baby (CSD 1).

Of the 20 clinical randomized trials analyzed in a systematic review on positions in the second stage of labor, nine appointed reduced duration of this stage when the parturient assumes non-supine position (lateral or vertical) compared to supine or gynecological position[6]. CSD 1's testimony exemplifies how women perceive reduction of the expulsive period, which improves their experience.

Pelvic dimensions are significantly expanded in vertical positions and increased efficiency of uterine contractions also occur because the aorta artery and vena cava are not occluded, which favors labor and delivery. It also favors the parturient's perception on the gradient of increasing uterine contractions and increased pressure on the perineum [1].

On the contrary, according to the CSD of the CI 7, the feeling that the delivery is faster is associated to medical interventions, especially the episiotomy.

CI 7 – The delivery is faster in the horizontal position due to the episiotomy.

I think the horizontal position is better because when I was there with nine of dilatation I simply went to the delivery room and they already made that little cut. Then, on the first or second try the baby got out. In the squatting position, you try

once, twice, thrice and then there's a time you have no strength anymore and [...] oh! they let it tear (CSD 7).

In a study on the perception of women regarding episiotomy, the majority of them reported its need so as to have the labor channel expanded to avoid risks to the baby, since the vagina cannot extend itself[12].

Episiotomy is a surgical procedure generally performed during childbirth in Latin America, while its use is reduced in European countries[13]. Brazil presents high rates of episiotomy, which is performed in approximately 94.2% of normal deliveries[2]. It contributes to the "naturalization" of the procedure because it makes some women consider this medical intervention, oftentimes unnecessary and routinely[5] used, as something positive that helps to end the delivery faster.

CI 3 – Strength is better directed in the vertical position, which reduces effort

The position helps us to exert strength, it's much easier [...] you manage to direct your strength to your legs. I'm not very agile in crouching down and getting up [...]so I thought I'd have cramps, but I had no problem at all, I felt more comfortable. It's better even for you to exert your strength because, in the other (horizontal position), you have no way to support your feet, your legs are dropped down. In this one (vertical position) you support your feet and it seems everything works faster. The squatting has several advantages: it's the position, the gravity, it's less painful, [...] the labor is very painful, but at the moment of expulsion it was easier, so I see advantages in squatting (CSD 3).

There is a diminished feeling of intense pain during the expulsive period in the vertical or lateral position when compared to the supine or gynecological position[6]. The perception that the vertical position contributes to exert strength and expel the fetus due to gravity was also described in another qualitative study. However, in this case, professionals considered the parturient was being rebellious because she insisted on being kept in this position and confined her to the delivery table[14].

CI 4 – The parturient manages to participate more and watches the birth of her child in the vertical position

Listen! I think that, in this (vertical delivery) we participate more [...] the nurse only helped me when the child was coming out, pulling the little head from one side to the other. I did this myself [...] you see everything, you see the child. On the one from my first daughter I didn't see anything, they took her from there, took her to the doctors' procedures, then they brought me the girl. And there (vertical position) you can see everything. So I think that for the mother it's more thrilling, you see when they cut the cord [...] I could see everything, so I liked it very much (CSD 4).

The vertical childbirth favors the parturient's participation, eases the observation of conducts performed and visualization of the birth, which are factors emotionally important to enable a positive experience in labor. The satisfaction with the delivery can be increased if women have the option to choose the position of delivery[11]. However, CI 8 reports that the health professional's active work during the attended birth is positive when women expect them "to help" and transfer responsibility to them.

CI 8 – The horizontal position generates security and feeling of being "helped"

I think that lying down you feel safer, it seems the professional helps you more. In the horizontal position I had a companion and in this one I had nobody [...] I didn't have a companion and felt really alone. So, I felt safer when people were there accompanying me because even when I had to exert strength they helped me more and, in the squatting position, they'd only say: strength and you can do it, you can do it, and I did (DCS 8).

Support from a companion can influence the woman's perception of the delivery regardless of the adopted position. Results from a clinical trial show that women who are supported by a companion of their choice during labor get more satisfied with the medical care and orientation received, which indicates positive change in the way health professionals deliver care[15].

CI 5 – Postpartum recovery is faster in the vertical position

It seems I recovered faster, because they didn't cut anything, there was only an internal stitch. I had almost ten stitches in the first (horizontal delivery), almost ten stitches in the second and third and in this one (vertical delivery) I did not have a single one. And it seems it was so fast I didn't suffer so much (CSD 5).

The women observed the difference between postpartum with (horizontal delivery) and without perineal suture (vertical delivery), associating integral perineum with faster recovery. Rates of intact

perineum are higher among women who adopt non-supine positions (sitting, kneeling, squatting) during delivery than those who adopt the supine position[11]. Lateral or vertical positions are associated to a reduced number of episiotomies[6]. Thus, vertical position during delivery is one of the strategies to reduce perineal trauma, swelling of the vulva and episiotomy[11, 6].

Negative aspects of the vertical and horizontal positions during delivery

The negative aspects of the horizontal position were more intensely reported by puerperal women when compared to reports on the vertical position (Table 2).

Table 2 – Central ideas on the negative aspects of the vertical and horizontal positions during delivery. Florianópolis, SC, 2006-2007

Central Ideas - Negative Aspects	
Vertical Position	**Horizontal position**
CI 1 - Dissatisfaction associated to discomfort in vertical position	CI 3 - Horizontal labor takes longer, increases suffering, pain and tiredness
CI 2 - The lack of obstetrical intervention during vertical labor generates the feeling of not being "helped"	CI 4 - Horizontal position makes the contact of the woman with whom performs the labor more difficult
	CI 5 - Not being able to move during pain is uncomfortable
	CI 6 - It is more difficult to exert strength for the baby to be born

Discomfort and lack of obstetrical interventions, reported as negative aspects of the vertical position (CI 1 and 2, Table 2), were reported as positive aspects of the horizontal delivery (CI 8 and 9, Table 1). This fact shows the veracity of what puerperal women reported from their experience. They were emphatic and systematically argued what was perceived as positive in one position and what was negative in the other. We consider it was due the characteristics of the women who were chosen to participate in the study, that is, they gave birth in both positions, which allowed them to compare their experiences. The same comparison occurred with negative aspects of the horizontal position (CI 3, 4, 5 and 6, Table 2) since they correspond to aspects appointed as positive of the vertical position and were inversely experienced in this position.

IC 1 – Dissatisfaction associated to discomfort in vertical position

I felt dissatisfied in the squatting position, I felt really uncomfortable. I guess it can be better, but you have to be trained during pregnancy [...] Then it can be better, because [...] you have to know what to expect. I got like, my leg got numb because I didn't know how to get in a good position (CSD 1).

The factors that influenced the position adopted by women during labor are innumerous and complex and it is difficult to identify the instinctive conduct women would adopt because this is strongly influenced by cultural standards recommended by care permeated by medical procedures[6]. Perhaps modern western women do not have the muscles required to stay in other positions like squatting, kneeling or in knee-chest position for long periods[4]. The squatting position supported by a stool or a cushion can be attractive to women during delivery[6]. It is important to highlight that the squatting position is not always addressed in educative activities during prenatal care. Moreover, not all of them participated in this practice as observed in this study.

The reduction of obstetrical interventions, especially episiotomy, associated to a more passive posture of the professional who attends the labor, generates the feeling of not being "helped" in these women (CI 2). This perception might be due to the interventionist practice in which the professional is the protagonist and women play a passive role, a practice that has become culturally accepted. This finding is supported by research in which none of the women interviewed expected natural childbirth without intervention. The author stresses that women know traditional hospital routines due to their previous childbirth experience and that they already know what to expect from care and do not know alternatives to the care offered by the biomedical model[16].

CI 4 – Horizontal position makes it difficult for women to communicate with the professional who performs the delivery

[ ] ....when you're lying down you see virtually nothing... you raise your legs and that's a barrier between you and the physician...you know...in the squatting position you're on top and see everything and I didn't even get embarrassed (CSD 4).

In contemporaneous practice, the supine position has always been associated to the convenience and visibility of professionals who take

care of the woman in labor and during childbirth, and is a position recommended in textbooks on the mechanism of labor[6]. This position eases the professional "work" when (s)he has an interventionist view. On the contrary, it makes it difficult for women to actively participate in the process because it inhibits their protagonist role. The horizontal position *per se* "forces" the parturient to be kept down, generating an asymmetric relation between the parturient and the professional. Thus, it contributes to the professional's attitude of exercising "control", while laboring in the vertical position creates the feeling of "exercising control". The awareness of professionals that women are the main protagonists of the process is the best way to abolish this attitude, so that women's dignity, individuality and values are taken into consideration[6].

CI 3 – Horizontal labor takes longer, increases suffering, pain and tiredness

There is no advantage in the horizontal delivery because we suffer much more, [...] we have much pain. After experiencing the squatting, we feel much better. When I was lying down, my own body asked me to wake up and sit [...] had to exert more strength, contractions would take longer to come, so, you know, your leg is up there, and then it took longer. In the horizontal, you had no option to sit or anything like that (CSD 3).

The puerperal women explain in the CSD how the horizontal position is uncomfortable, hinders movements, increases suffering, tiredness and duration of the expulsive period, generating a negative perception. Qualitative studies present similar results, that is, women experience more severe pain during the supine position and prefer other positions[17-18].

CONCLUSIONS

In this study, positive and negative aspects appointed by women regarding vertical and horizontal positions are a result of their comparison between both positions, since they had already experienced childbirth in both.

The positive aspects of the vertical position reflect the need for women to actively participate in the delivery, the perception that this is the most comfortable position and eases fetus expulsion. On the contrary, the horizontal position makes these aspects difficult, generating a negative perception, since it hinders movement, increases suffering, tiredness and duration of the expulsive period and obstetrical interventions.

Generally, the positive aspects of the horizontal labor are associated to episiotomy, to the opportunity to remain lying down and the feeling of being "helped". Thus, some women relate the care delivered during childbirth with the need for a more active conduct of health professionals and a more passive one from women; they even perceive the reduction of interventions as a negative aspect of the vertical position.

Considering all the nuances appointed in the women's discourse, the positive aspects of the vertical position emerged more intensively and frequently than the negative ones. The CSDs appoint that the positive aspects of the vertical position and negative aspects of the horizontal position are in agreement with scientific evidence, generated in clinical trials and systematic reviews on the theme. This fact reveals that women also perceive the adoption of the vertical position during obstetrical practice as beneficial.

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